



1645

Atty. Docket No.: 17633/1082

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Tongwen Wang  
Serial No.: 09/927,738  
Filed: August 10, 2001  
Entitled: Compositions and methods for  
modulating TGF-beta signaling

Examiner: Not Yet Assigned  
Group Art Unit: 1645  
Conf. No.: 7298

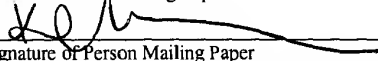
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Kathleen Williams

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Commissioner for Patents  
Washington, D.C. 20231

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**TRANSMITTAL LETTER**

Enclosed for filing in the above-identified patent application, please find the following documents: **TECH CENTER 1600/2900**

1. Information Disclosure Statement;
2. Form PTO-1449
3. Copies of Cited References; and
4. Return Post Card.

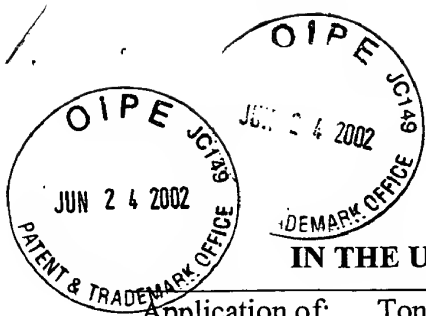
The Commissioner for Patents is hereby authorized to charge any additional fees or credit any overpayment in the total fees to Deposit Account No. 16-0085, Reference No. 17633/1082. A duplicate of this transmittal letter is enclosed for this purpose.

Respectfully submitted,

Date: 6/19/02



Name: Kathleen Williams  
Registration No.: 34,380  
Customer No.: 29933  
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Commissioner for Patents  
Washington, D.C. 20231

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR §§ 1.56, 1.97 AND 1.98**

Dear Sir:

In accordance with the duty of disclosure under 37 CFR § 1.56, Applicant submits this Information Disclosure Statement pursuant to 37 CFR §§ 1.97 and 1.98 in the above-identified application for consideration by the Patent Office. A listing of the cited documents is also enclosed, as well as, for the Examiner's convenience, copies of the documents in the list. Pursuant to CFR § 1.97(b)(3), because this Statement is being submitted before the first Office Action on the merits, no fee is required.

Applicant does not intend to represent that any of the documents submitted herein are material prior art to this invention or that the list represents an exhaustive search of documents related to this invention.

Applicant respectfully requests that the documents submitted herein be considered and made of record in this application.

Respectfully submitted,

Date: 6/19/02

Kathleen Williams  
Name: Kathleen Williams  
Registration No.: 34,380  
Customer No.: 29933  
Palmer & Dodge LLP  
111 Huntington Avenue  
Boston, MA 02199-7613  
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USPTO Form 1449 Patent and Trademark Office		U.S. Department of Commerce		Attorney Docket No. 17633/1082		TECH CENTER 1600/2900 Serial No. 09/927,738	
INFORMATION DISCLOSURE STATEMENT				Applicant(s): Tongwen Wang			
				Filing Date: August 10, 2001		Group: 1645	
U.S. PATENT DOCUMENTS							
Examiner Initial		Patent No.	Date	Name	Class	Subclass	Filing Date (if appropriate)
FOREIGN PATENT DOCUMENTS							
Examiner Initial		Document No.	Date	Country	Class	Subclass	Translation
							YES NO
	1	WO 98/53066	November 26, 1998	PCT	C12N	15/12	Y
OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)							
	2	Abdollah, et al., "TBRI Phosphorylation of Smad2 on Ser <sup>465</sup> and Ser <sup>467</sup> Is Required for Smad2-Smad4 Complex Formation and Signaling", <i>Journal of Biological Chemistry</i> , 272, (1997): 27678-27685.					
	3	Baker, J. & Harland, R.M., "A Novel Mesoderm Inducer, Madr2, Functions in the Activin Signal Transduction Pathway", <i>Genes and Development</i> , 10, (1996): 1880-1889.					
	4	Chen, Y., et al., "Regulation of Transforming Growth Factor Beta- and Activin-Induced Transcription by Mammalian Mad Proteins", <i>PNAS-Proceedings of the National Academy of Sciences</i> , 93, (1996): 12992-12997.					
	5	Chen, X., et al., "Smad4 and FAST-1 in the Assembly of Activin-Responsive Factor", <i>Nature</i> , 389, (1997): 85-89.					
	6	de Caestecker, M.P., et al., "Characterization of Functional Domains within Smad4 / DPC4", <i>Journal of Biological Chemistry</i> , 272, (1997), 13690-13696.					
	7	Dennler, S., et al., "Direct Binding of Smad3 and Smad4 to Critical TGF-Inducible Elements in the Promoter of Human Plasminogen Activator Inhibitor-Type 1 Gene", <i>Embo Journal</i> , 17, (1998): 3091-3100.					
	8	Hata, A., et al., "Mutations Increasing Autoinhibition Inactivate Tumour Suppressors Smad2 and Smad4", <i>Nature</i> , 388, (1997): 82 - 87.					
	9	Kim, J., et al., "Drosophila Mad Binds to DNA and Directly Mediates Activation of Vestigial by Decapentaplegic", <i>Nature</i> , 388, (1997): 304-308.					
	10	Kretschmar, M., et al., "The TGF-Beta Family Mediator Smad1 is Phosphorylated Directly and Activated Functionally by the BMP Receptor Kinase", <i>Genes and Development</i> , 11, (1997): 984-995.					
	11	Lagna, G., et al., "Partnerships Between DPC4 and SMAD Proteins in TGF-Beta Signalling Pathways", <i>Nature</i> , 383, (1996): 832-836.					
	12	Liu, F., et al., "A Human Mad Protein Acting as a BMP-regulated Transcriptional Activator", <i>Nature</i> , 381, (1996) 620-623.					



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13	Macias-Silva, M., et al., "MADR2 is a Substrate of the TGFbeta Receptor and Its Phosphorylation is Required for Nuclear Accumulation and Signaling", <i>Cell</i> , 87, (1996): 1215-1224.	
14	Schutte, M., et al., "DPC4 Gene in Various Tumor Types", <i>Cancer Research</i> , 56, (1996): 2527-2530.	
15	Souchelnytskyi, S., et al., "Phosphorylation of Ser <sup>465</sup> and Ser <sup>467</sup> in the C Terminus of Smad2 Mediates Interaction with Smad4 and is Required for Transforming Growth Factor-Beta Signaling", <i>Journal of Biological Chemistry</i> , 272, (1997): 28107 - 28115.	
16	Yingling, J. M., et al., "Tumor Suppressor Smad4 is a Transforming Growth Factor Beta-Inducible DNA Binding Protein", <i>Molecular and Cellular Biology</i> , 17, (1997): 7019-7028.	
17	Wu, R. Y., et al., "Heteromeric and Homomeric Interactions Correlate with Signaling Activity and Functional Cooperativity of Smad3 and Smad4/DPC4", <i>Molecular and Cellular Biology</i> , 17, (1997): 2521-2528.	
18	Zawel, L., et al., "Human Smad3 and Smad4 are Sequence-Specific Transcription Activators", <i>Molecules and Cells</i> , 1, (1998): 611-617.	
19	Zwickl, P., et al., "Critical Elements in Proteasome Assembly", <i>Nature Structural Biology</i> , 1, (1994): 765-770.	
EXAMINER		DATE CONSIDERED
<small>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.</small>		
<small>**Copies of references not provided at the time of this submission.</small>		